

# **Final Recommendation for the Potentially Avoidable Utilization Savings Policy for Rate Year 2019**

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This document contains the final staff recommendations for updating the Potentially Avoidable Utilization (PAU) Savings Policy for RY 2019.

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## CHANGES FROM DRAFT TO FINAL RECOMMENDATION

See staff responses to Commissioner and stakeholder feedback (page 6). There are no substantive changes between draft and final policies outside of responses to feedback.

## RECOMMENDATIONS

Staff recommends the following for the Potentially Avoidable Utilization (PAU) Savings policy for RY 2019:

1. Increase the net PAU reduction by 0.30%, which would be a cumulative PAU reduction of 1.75%, compared to the 1.45% reduction in RY 2018.
2. Cap the PAU Savings reduction for hospitals with higher socioeconomic burden at the statewide average reduction; however, solicit input on phasing out or adjusting for subsequent years.
3. Evaluate expansion and refinement of the PAU measure to incorporate additional categories of potentially avoidable admissions and potentially low-value care.

## INTRODUCTION

The Maryland Health Services Cost Review Commission (HSCRC or Commission) operates a Potentially Avoidable Utilization (PAU) savings policy as part of its portfolio of value-based payment policies. The PAU Savings policy is an important tool to maintain hospitals' focus on improving patient care and health through reducing potentially avoidable utilization and its associated costs. While hospitals have achieved significant progress to date in transforming the delivery system, the State must maintain continued emphasis on care management, quality of care, and care coordination, especially for complex and high-needs patients. The PAU Savings policy is also important for maintaining Maryland's exemption from the Centers for Medicare & Medicaid Services (CMS) quality-based payment programs, which is pivotal, as this autonomy allows the State to operate its own programs on an all-payer basis.

The PAU Savings Policy prospectively reduces hospital global budget revenues in anticipation of volume reductions due to care transformation efforts (refer to Appendix I for a description of the current PAU measures, and Appendix II for a background and history of the HSCRC Shared Savings Programs). All hospitals contribute to statewide PAU Savings; however, each hospital's reduction is proportional to their percentage of PAU revenue. In contrast to HSCRC's other quality programs, which reward or penalize hospitals based on performance, the PAU Savings Policy does not offer opportunity for reward, as it is intentionally designed to assure savings to payers and reduce costs for consumers.

The purpose of the following sections is to present supporting analyses for the PAU Savings final recommendation for rate year (RY) 2019. Additional information about the future expansion of the PAU measure, as well as other considerations regarding avoidable utilization, is

available in the enclosed Supplemental Report on Efforts to Modernize PAU Measurement and Adjustment in Future Years.

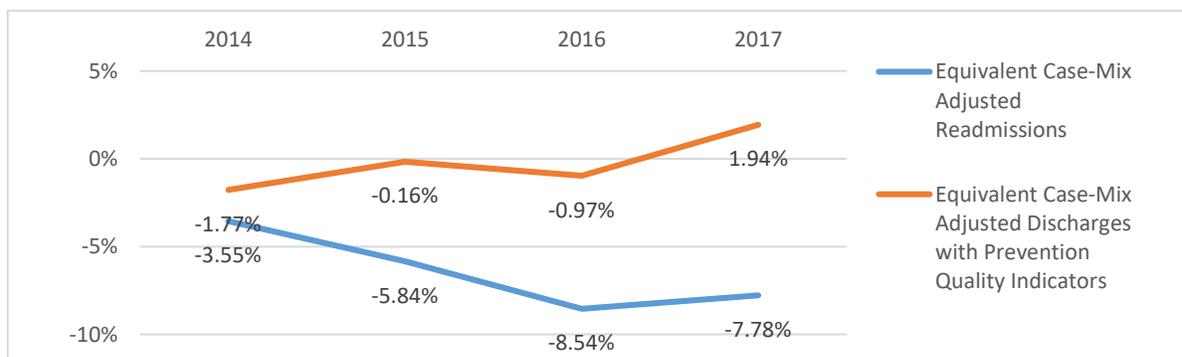
## ASSESSMENT

### Potentially Avoidable Utilization Performance

Potentially Avoidable Utilization (PAU) may be defined as “hospital care that is unplanned and can be prevented through improved care coordination, effective primary care and improved population health.”<sup>1</sup> In RY 2019, HSCRC continues to determine PAU savings based on hospital performance from the prior calendar year, i.e. CY 2017, and PAU continues to be defined as: a) readmissions, assessed at the receiving hospital, and b) Prevention Quality Indicators (PQIs).<sup>2</sup>

Figure 1 below shows trends in equivalent case-mix adjusted discharges for readmissions and Prevention Quality Indicators since calendar year (CY) 2013. Compared to CY 2013, the all-payer equivalent case-mix adjusted discharges that were readmissions declined 7.8% through CY2017; however this is slightly less of a reduction than had been experienced through CY2016 (-8.54%).<sup>3</sup> This reduction in discharges is different than the reduction in the case-mix adjusted readmission rates presented in the Readmission Reduction Improvement Program (RRIP). In contrast, equivalent case-mix adjusted discharges with PQIs increased by 1.94% in CY2017 compared to CY2013.<sup>4</sup> However, some readmission reductions may impact PQI discharges; for example, an ambulatory-care sensitive discharge within 30 days of an index admission would be considered a readmission, but if that discharge is prevented until day 31, it is considered a PQI. In addition, these numbers represent the change in discharges, not a rate per population, and thus are not equivalent to other PQI rates presented with the population as the denominator. (See Future Measurement section for more discussion). Appendix III provides more detailed information on specific PQI trends.

**Figure 1. Percent Change in Readmissions and PQIs compared to CY 2013**



<sup>1</sup> [http://www.qualityindicators.ahrq.gov/modules/pqi\\_overview.aspx](http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx).

<sup>2</sup> PQIs measure inpatient admissions and observation stays greater than 23 hours for ambulatory care sensitive conditions. See Appendix II

<sup>3</sup> These numbers may differ from those in previous year reports due to data and grouper updates.

<sup>4</sup> Trends in PQIs between 2015 and 2016 should be interpreted with caution due to the implementation of ICD-10.

## Proposed Revenue Reduction

Each year, the State reviews total cost of care and hospital savings trends, in conjunction with trends in calculated avoidable utilization, to determine the statewide PAU savings reduction for the upcoming rate year. In RY 2018, the HSCRC approved an additional statewide reduction of 0.20%, which resulted in a cumulative reduction of 1.45%.

In RY 2019, HSCRC staff proposes to set the annual savings reduction at 0.30%, which will result in a statewide PAU savings reduction of 1.75% of total hospital revenue. Figure 2 shows the total and net revenue reduction associated with a PAU reduction of 1.75%. Of particular note, the modeled 1.75% reduction in budgets reflects approximately 16.4% of statewide experienced PAU under the current definition, which suggests that 84.6% of PAU is still funded in the Global Budget Revenue Model and hospitals with larger PAU reductions can retain the savings under the global budgets.

**Figure 2. Proposed RY 2019 Statewide Savings\***

<b>Statewide Results</b>	<b>Formula</b>	<b>Value</b>		
RY 2018 Total Approved Permanent Revenue	A	\$16.3 billion		
Total CY17 PAU \$ % (Observed)	B	11.00%		
Total CY17 PAU \$	C	\$1.8 billion		
<b>Statewide Total Calculations</b>	<b>Formula</b>	<b>Total</b>	<b>RY 2018**</b>	<b>Net Adjustment</b>
Proposed RY19 Revenue Adjustment %	D	-1.75%	-1.45%	-0.30%
Proposed RY19 Revenue Adjustment \$	E=A*D	-\$285 million	-\$228 million	-\$56 million
Proposed RY19 Revenue Adjustment % of Total PAU \$	F=E/C	-15.9%		

\*Figures may not add due to rounding

\*\* -1.45% of RY 2018 Total Approved Permanent Revenue is -\$237 million; however, the figure cited (-\$228 million) is provided because this was -1.45% of RY 2017 Total Approved Permanent Revenue and therefore better reflects the actual proposed net dollar reduction to RY 2019 (-\$56 million).

## Hospital Protections

The Commission and stakeholders aim to ensure that hospitals that treat a higher proportion of disadvantaged patients have the needed resources for care delivery and improvement, while continuing to encourage improvements in the quality of care or care coordination for these patients. Due to these concerns, a protection policy was first approved in RY 2016. Under the RY 2018 PAU Savings Policy, the PAU payment reductions are capped at the state average for hospital that serve a high proportion of disadvantaged populations.<sup>5</sup> For future years, HSCRC staff is discussing adjusting or even phasing out this protection. However, given the potential revenue impact for affected hospitals and to allow time for further feedback, staff is recommending to continue the RY 2018 protection methodology for RY 2019. (For more information on staff and stakeholder considerations regarding protection under the PAU Savings

<sup>5</sup> The measure includes the percentage of Medicaid, Self-pay and Charity equivalent case-mix adjusted readmission discharges for inpatient and observation cases with 23 hours or longer stays, with protection provided to those hospitals in the top quartile.

Policy, please refer to the Supplemental Report on Efforts to Modernize PAU Measurement and Adjustment in Future Years).

Appendix V provides the resulting revenue adjustments of the PAU Savings policy based on the 0.30 percent annual reduction (1.75 percent total) in total hospital revenue with and without these protections.

### **Future Expansion of PAU**

HSCRC staff recommends evaluating expansion of PAU to incorporate additional categories of avoidable utilization, such as additional potentially avoidable admissions and/or low-value care. Over the next 8 months, staff will work to expand PAU and develop processes for continued expansion under the updated measure, while minimizing hospital measurement burden. Staff is also exploring the potential opportunity for hospitals to propose their own definitions and measurements of Potentially Avoidable Utilization, while noting the reporting burden and validation challenges that would be associated with such an effort. (For more information on staff and stakeholder considerations regarding expansion of the PAU measure in future years, please refer to the Supplemental Report on Efforts to Modernize PAU Measurement and Adjustment in Future Years).

## RESPONSES TO FEEDBACK

The Commission did not receive any comment letters in response to the RY2019 Draft PAU Savings Policy; however staff did receive substantial feedback from Commissioners Keane, Colmers, and Elliott and issues were also discussed at Performance Measurement Work Group. Some stakeholders did include concerns about PAU in the update factor response letters. Staff has addressed some of these below although the size of the PAU reduction is addressed in the update factor policy. In the future staff respectfully requests that stakeholders submit letters for the specific policies to ensure all comments are addressed.

### Clinical input and Hospital-defined PAU

**Comment:** Commissioner Colmers continues to recommend engaging the clinical community in identifying potential avoidable utilization through hospital-defined PAU Savings pilot programs, an idea that was originally suggested in the white paper authored by Commissioners Colmers and Keane. This proposed policy could initially be an experimental program, limited to a small number of hospitals with the capability and interest to be successful. By engaging clinicians in defining PAU, the hospital-defined PAU measure may better align with clinical decision-making and evidence-based practice, which may allow for both complexity and innovation that are not possible in a statewide program, such as focusing on identification of avoidable testing in a residency program. Commissioner Colmers suggested that some existing measures of PAU could be used, such as 30 day unplanned readmissions, in addition to new measures, providing hospitals the opportunity to assume additional financial risk as they focus on new and different ways of measuring potentially avoidable utilization.

#### **Staff response:**

Staff strongly agrees with Commissioner Colmers' focus on engaging the clinical community. Regardless of how hospital-defined PAU may be implemented, staff is committed to working with clinicians to understand how they view potentially avoidable utilization and what measures should be examined. HSCRC staff plans on meeting with clinicians over the next few months to guide measure selection, followed by discussion in a PAU subgroup, which will also encourage clinician participation.

While there were some initial concerns from hospitals and payers regarding self-identifying PAU, staff is committed to collaborating on hospital-defined PAU. Staff continues to request input from hospitals on their interest or concerns on this possible opportunity and how this could be implemented. Some of the implementation issues that will need to be addressed include verifying the accuracy of non-HSCRC data (such as through auditing or certification processes) and the potential impact on other hospitals. One potential solution may be to add an optional component on top of the statewide PAU Savings.

The optional program could be tied to the update factor. In order to drive success in achieving population health improvements and reducing avoidable and unnecessary utilization, new aggressive goals will need to be established. Some portion of inflation (say 0.50 percent) could

be set aside and only those hospitals adopting approved Bold Improvement Goals (BIG) with care partners would be eligible for that portion of inflation. For example, one hospital could commit to a thirty percent reduction in chronic obstructive pulmonary disease (COPD)-related admissions with interventions that start with early detection and prevention of COPD, disease and medication management supports, pulmonary rehabilitation, vaccines for pneumonia and flu, among others. Another hospital might commit to reduced hospitalizations for sepsis and related pneumonia and urinary tract infections or a reduction in diabetes and related conditions.

In this hospital-defined PAU pilot program or a PAU Innovation Laboratory, interested hospitals could test measures of potentially avoidable utilization that could ultimately be considered for statewide adoption. In exchange for accepting a BIG goal beyond the statewide savings program, hospitals participating in the program could receive higher inflation adjustments for adopting and achieving BIG goals.

### Measuring readmissions at the receiving hospital

**Concern:** Commissioners Colmers, Keane, and Elliott expressed concern that the PAU methodology measures readmissions revenue at the receiving hospital, rather than the index (sending) hospital. Of particular concern was an example wherein a patient may be discharged from a hospital in Baltimore City and readmitted to a hospital in Eastern Shore. In that scenario, it may be difficult for hospitals to coordinate and prevent the readmission. In addition, if a hospital discharges a patient after a surgery, it may be more appropriate for the sending hospital to be accountable for that patient rather than a community hospital.

#### Staff response:

In Rate Year 2017, HSCRC changed the PAU definition used in the savings policy to align it with the incentives of the GBR and with the PAU definition already in place in the market shift methodology. This definition changed the focus of the readmissions measure from “sending” hospitals to “receiving” hospitals. In other words, the updated PAU methodology calculates the revenue associated with unplanned readmissions that occur at the hospital, regardless of where the original (index) admission occurred. The reason for this change was because when a patient is readmitted to a hospital, the revenue from that hospital’s GBR is used to fund the cost associated with that readmission. Thus any reduction in readmissions generates savings only for the hospital that no longer bears the cost of providing services for the readmission, i.e. the receiving hospital, which is the incentive of the GBR methodology. Additionally, assigning readmissions to the receiving hospital should incentivize hospitals to work within their service areas to reduce readmissions, regardless of where the index stay took place. For example, many readmissions within a service area are due to chronic conditions, such as mental health, chronic obstructive pulmonary disease (COPD), and congestive heart failure (CHF); therefore are amenable to care management even if the patient was recently admitted at another hospital.

Staff have also analyzed the extent to which readmissions occur at the same index hospital or within the same primary service area or geographic area to assess how many readmissions may be more directly affected by hospitals. The analysis tested different hospital geographic areas:

receiving hospital primary service area<sup>6</sup>; receiving hospital primary service area-plus<sup>7</sup>; receiving hospital county;<sup>8</sup> and receiving hospital region.<sup>9</sup> Analysis of CY2017 PAU readmissions shows that statewide two-thirds of PAU readmissions are at the same sending and receiving hospital (48,210 readmits out of 71,903 readmits). PAU readmissions from the same sending and receiving hospital and/or from the hospital’s primary service area represent 83% of all PAU readmissions. When the analysis is expanded to the hospital’s regional geographic area, 94% of all PAU readmissions are from the same sending and receiving hospital and/or from the receiving hospital’s region.

There are regional differences when performing this analysis, as more densely populated areas with greater market saturation tend to have a lower percentage of readmits from the same index hospital - Baltimore County and Baltimore City are the lowest in the State at 59.8% of PAU readmissions occurring at the same sending and receiving hospital (See Figure 3). However, this regional variation sharply narrows when the comparison point is PAU readmissions from the same sending and receiving hospital and/or from the hospital’s primary service area (Hospitals in Baltimore County and Baltimore City: 77.7%), and the variation virtually disappears when comparing PAU readmissions from the same sending and receiving hospital and/or from the receiving hospital’s region (Hospitals in Baltimore County and Baltimore City: 91.8%).

**Figure 3: Regional Variation of Readmissions (% of CY2017 Total PAU readmits by Region)**

Region	Same* hospital	Same hospital and/or PSA	Same hospital and/or PSA-Plus	Same hospital and/or PSA-Plus or County	Same hospital and/or PSA-Plus or Region
	Same sending/receiving hospital	Same + readmits from receiving hospital primary service area (PSA)	Same + readmits from receiving additional PSA-plus (PSAP)	Same + readmits from receiving hospital PSAP or county	Same + readmits from receiving hospital PSA, county, or region
Baltimore County/Baltimore City	59.8%	77.7%	78.2%	86.3%	91.8%
Capitol Region <sup>a</sup>	63.5%	83.7%	84.2%	91.1%	95.7%
Central without Baltimore <sup>b</sup>	74.8%	86.9%	88.5%	91.2%	92.5%
Eastern Shore and Delaware <sup>c</sup>	81.3%	91.3%	92.4%	94.4%	98.2%
Frederick	84.9%	94.5%	96.1%	96.1%	96.1%
Harford, Cecil, and Kent	73.6%	87.5%	90.0%	94.5%	96.6%
Southern Maryland <sup>d</sup>	79.1%	87.8%	90.7%	90.7%	95.0%
Western MD and West Virginia <sup>e</sup>	91.8%	98.1%	98.2%	98.3%	99.1%
<b>Statewide</b>	<b>67.0%</b>	<b>83.0%</b>	<b>83.8%</b>	<b>89.7%</b>	<b>93.9%</b>

\*Same hospital indicates the same sending and receiving hospital

<sup>a</sup> Prince George’s, Montgomery, DC; <sup>b</sup> Howard, Carroll, Anne Arundel; <sup>c</sup> Kent, Queen Anne’s, Dorchester, Talbot, Wicomico, Worcester, Caroline, Somerset, Delaware; <sup>d</sup> Calvert, Charles, St Mary’s

<sup>6</sup>PSAs as defined in hospital global budget revenue agreements

<sup>7</sup> PSA-plus as developed to ensure PSAs captured all zip codes in the state

<sup>8</sup> County in which hospital is located

<sup>9</sup> Region in which hospital’s county is located. Regions were assigned as following: Baltimore County and Baltimore City, Central Maryland less Baltimore County/Baltimore City, Eastern Shore and Delaware, Western Maryland and West Virginia, Eastern Shore, Frederick, Cecil/Kent/Harford, Southern Maryland, and Capitol Region.

In addition to analysis of discharges, staff has also analyzed the extent to which revenue associated with readmissions occur at the same index hospital or within the same primary service area or geographic area. This analysis was performed to ensure that there is similar relationship between readmission discharges and revenue associated with readmissions since the PAU methodology is expressed in terms of revenue. (See Figure 4)

**Figure 4: Comparison between PAU Readmission Discharges and Revenue**

Step	Discharges			Revenue		
	Additional Step	Cumulative	Cumulative %	Additional Step	Cumulative	Cumulative %
Same* hospital	48210	48210	67.0%	\$762,472,904	\$762,472,904	66.0%
Same hospital and/or PSA	11462	59672	83.0%	\$182,411,370	\$944,884,274	81.8%
Same hospital and/or PSA-Plus	609	60281	83.8%	\$7,840,580	\$952,724,854	82.5%
Same hospital and/or PSA-Plus or County	4198	64479	89.7%	\$71,112,924	\$1,023,837,778	88.6%
Same hospital and/or PSA-Plus or Region	3010	67489	93.9%	\$45,248,703	\$1,069,086,481	92.6%
<b>Total</b>		<b>71903</b>	<b>100%</b>		<b>\$1,155,092,443</b>	<b>100%</b>

Staff recognize the Commissioners’ concerns around the receiving hospital aspect of the PAU methodology, but analysis shows that most PAU readmissions are from the same sending and receiving hospital, and when this analysis is expanded to include primary service area or a broader geographic area, the vast majority of readmissions are attributable to the receiving hospitals. Furthermore, the model must focus on all readmissions if the State is to reduce avoidable utilization and total cost of care. In addition, both the current PAU Savings Policy and Market Shift methodologies require measuring revenue at the receiving hospital. Under the Global Budget Revenue model, the fundamental idea is that hospitals that reduce PAU can retain that revenue and improve their financial standing while improving quality of care. Furthermore, staff believes that it is imperative for our statewide all-payer model to have incentives for hospitals to work outside of the hospital walls and with other hospitals to improve care and reduce avoidable utilization.

Staff acknowledges that holding receiving hospitals accountable for readmissions is a paradigm shift; however, staff believes this in keeping with the overall incentives of the GBR. Staff also believes that the receiving hospital methodology in the PAU Savings Policy balances well with the index hospital methodology in the Readmissions Reduction Incentive Program and maximizes incentives to reduce readmissions in the state. Based on staff analyses and reviews of the initial reasoning for the construct of the PAU methodology, staff recommends to keep the existing methodology for RY2019. As PAU measures are expanded and modernized, further alignment between readmissions and geographic areas will be explored.

## Use of Avoidable Admissions in PAU

**Concern:** In their Update Factor comment letter, Maryland Hospital Association expressed concern about the appropriateness of the current use of the Agency for Healthcare Research and Quality's Prevention Quality Indicators (PQIs, also known as avoidable admissions) as a percentage of a hospital's total revenue. Maryland Hospital Association notes that Prevention Quality Indicators were originally intended to measure the percentage of admissions for "ambulatory sensitive conditions" within a population, not as a percentage of hospital discharges. There may be unrelated reasons for changes in hospital discharge patterns that impact the overall number of discharges. While the Maryland Hospital Association letter notes staff efforts to address this concern, the letter also recommends eliminating the revenue reduction associated with avoidable admissions as a solution in the interim.

### Staff Response:

HSCRC continues to recommend the use of avoidable admissions and readmissions in the RY2019 policy. As Maryland moves forward toward implementation of the Total Cost of Care Model and the Maryland Primary Care Program component, increased focus on avoidable admissions will be critical to the success of population health improvement and improved chronic care. While the staff agrees to work with stakeholder to address the best ways to use the measures, there is a clear need to increase the performance requirements for avoidable admissions. As the Maryland Hospital Association noted, it is essential to examine PAU measurement in future years to address stakeholder measurement concerns and to expand the measures to include additional categories of avoidable admissions and utilization. The Commission can explore using geographic methods in PAU as a population-level denominator for readmissions and avoidable admissions. However, this change might require a shift from a revenue-based measure to a discharge-per capita measure, which would require additional steps to translate to revenue. The impact of these changes on other methodologies, such as Market Shift and Demographic Adjustment, will need to be addressed, since these three policy areas are related. Staff plans on working through some of these technical issues with a PAU subgroup over the summer and fall months and with the Performance Measure Work Group over the next year.

Finally, staff notes that removing avoidable admissions from the PAU methodology would not eliminate a revenue reduction, as requested by the Maryland Hospital Association. The total statewide revenue reduction of 1.75% of permanent revenue (-0.3% net) will stay the same, regardless of whether avoidable admissions revenue is included or not, because a reduction of revenue of this magnitude is warranted in a model that is focused on reducing avoidable and unnecessary utilization as a core model component and measure of success.<sup>10</sup> Moreover, the State's contract with the Centers for Medicare and Medicaid Services (CMS) requires that its quality programs have savings in excess of national programs, and eliminating the PAU reduction proportional to revenue associated with avoidable admissions would imperil the State's ability to meet this metric. Also, it should be noted that eliminating avoidable admissions

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<sup>10</sup> The total cost of care guardrail requires that Maryland fee-for-service Medicare beneficiaries per capita cannot have cost growth greater than the nation in consecutive years and cannot exceed national growth by 1% in any year.

revenue would require a larger reduction of the readmissions revenue to achieve the reduction of 1.75% total revenue, which would effectively redistribute the revenue reduction differently across hospitals.

## PAU Denominator

**Concern:** Commissioner Keane expressed concern that the denominator used in the PAU percent of revenue measure represented total revenue rather revenue associated with inpatient and observation stays greater than 23 hours. The concern was that there was revenue in the denominator that was not eligible to be considered PAU in the numerator, which could arbitrarily impact a hospital’s revenue adjustment.

### Staff Response:

After further consideration, staff does not believe there is a significant denominator issue; however, staff does note that the protection<sup>11</sup> in the methodology, which redistributes approximately 3.4% of the entire PAU reduction (\$9.5 million of the \$285 million reduction), is affected by what revenue denominator is used. Staff analyzed and presented this concern in depth to Performance Measurement Work Group and to Commissioner Keane. Analysis showed that prior to the protection, the denominator does not affect a hospital’s PAU reduction because while PAU is expressed as a rate of total revenue or inpatient revenue, it is then multiplied by the selected denominator to equal the same value.

Figure 5 below presents examples to illustrate this issue. For both the basic and hospital examples, the CY2017 PAU percentage of revenue (D) is calculated using the hospital CY2017 PAU revenue (B) divided by hospital’s CY2017 \$ revenue (C). The hospital’s percent of PAU revenue (D) is applied to the hospital’s permanent revenue (A) to estimate the PAU revenue in the following year (E). The estimated PAU revenue (E) is multiplied by the percent required PAU reduction (F). As long as the revenue numbers for A and C are aligned (both total revenue or both inpatient only revenue), there is no effect on the pre-protection adjustment.

Figure 5: PAU denominator examples

		Basic example Total \$	Basic example Inpatient + Obs > 23 hrs \$	Hospital example \$ Total	Hospital example Inpatient + Obs > 23 hrs \$
Ry18 Permanent revenue	A	\$100	\$50	\$187 million	\$119 million
Hosp CY17 PAU \$	B	\$10	\$10	\$30 million	\$30 million
Hosp CY17 \$	C	\$100	\$50	\$197 million	\$125 million
Hosp CY17 PAU %	D=B/C	10%	20%	15.4%	24.3%
Estimated PAU \$	E=D*A	\$10	\$10	\$28.8 million	\$28.8 million
RY18 PAU Revenue Reduction %	F	-15.9%	-15.9%	-15.9%	-15.9%
Pre protection adjustment (\$)	G=E*F	-\$1.59	-\$1.59	-\$4.6 million	-\$4.6 million

<sup>11</sup> Hospitals in the top quartile of Medicaid, self-pay and charity case-mix adjusted discharges are eligible for protection.

As previously mentioned, the denominator does have an impact on the post-protection adjustments in PAU. This is because the amount of protection received by hospitals who are eligible for protection depends on the percentage variance between the hospital PAU percent of revenue and the statewide percent of PAU revenue. The ratio of inpatient to outpatient revenue at a protected hospital may impact this variance, resulting in a redistribution of approximately \$2 million dollars in revenue statewide when inpatient revenue is used as denominator. As aforementioned, the total protection is approximately \$9.5 million statewide.

Initially, staff developed protection based on total revenue rather than inpatient revenue since the total financial impact on affected hospitals is of concern and the current measures include some outpatient PAUs. Staff does not recommend altering the methodology at this time. Moving forward staff plans to garner its resources to expand the definition of PAU, including additional services provided in a hospital outpatient setting,

### Inpatient focus of current PAU Measure

**Concern:** Commissioners Keane and Colmers, as well as CareFirst in the Performance Measurement Work Group, expressed concern that PAU is limited largely to inpatient experience. There is additional unnecessary utilization in the system that hospitals may feel they have a greater ability to manage and reduce. In addition, hospitals with larger inpatient to outpatient revenue may feel more of their revenue is being captured in PAU compared to other hospitals.

**Staff response:** Staff agrees with these concerns, and is committed to expanding PAU through “expanding the numerator”, as outlined in the PAU Supplemental Report included in the Draft RY2019 PAU Savings Policy. Expanding the numerator may include measures to quantify potentially low value care as well as additional measures for population health that capture a larger degree of outpatient hospital care. However, for these additional measures to be robust and meaningful in the clinical setting, strong clinical partnerships and consumer dialogues are necessary. For these measures to be impactful in changing hospital/clinician behavior, the performance measures should be known prior to the performance period. Staff aims for new PAU measures to be incorporated into reporting by early Calendar Year 2019 so hospitals can monitor progress throughout the performance period. However, if stakeholders are comfortable including these measures as part of calendar year 2018 performance, staff does not foresee any problems with implementing these measures for RY2020 PAU savings adjustment, even though the performance period will be largely concluded. While staff understands that this plan does not immediately address and ameliorate concerns around the current methodology; it provides a roadmap for a collaborative process for the future.

## RECOMMENDATIONS

Staff recommends the following for the Potentially Avoidable Utilization (PAU) Savings policy for RY 2019:

1. Increase the net PAU reduction by 0.30%, which would be a cumulative PAU reduction of 1.75%, compared to the 1.45% reduction in RY 2018.
2. Cap the PAU Savings reduction at the statewide average reduction for hospitals with higher socioeconomic burden; however, solicit input on phasing out or adjusting for subsequent years
3. Evaluate expansion and refinement of the PAU measure to incorporate additional categories of potentially avoidable admissions and potentially low-value care.

## LIST OF ABBREVIATIONS

ARR	Admission-Readmission Revenue Program
CMS	Centers for Medicare & Medicaid Services
CY	Calendar year
ECMAD	Equivalent case-mix adjusted discharge
GBR	Global budget revenue
HRRP	Hospital Readmissions Reduction Program
HSCRC	Health Services Cost Review Commission
PAU	Potentially avoidable utilization
PQI	Prevention quality indicators
PSA-Plus	Primary Service Area-Plus
RRIP	Readmissions Reduction Incentive Program
RY	Rate year
TPR	Total patient revenue

## APPENDIX I. PAU MEASURE SPECIFICATION

The measure of potentially avoidable utilization (PAU) used in the PAU Savings Policy is calculated as the percentage of total hospital inpatient and outpatient revenue attributed to PAU at each hospital. The PAU measure is comprised of the revenue from readmissions and Prevention Quality Indicators (PQIs). Under the PAU logic, readmissions are calculated first, followed by PQIs, so the revenue from a hospitalization flagged as both a readmission and a PQI would only be counted once in PAU.

Readmissions are admissions to a hospital (defined as inpatient admission or observation stay greater than 23 hours) within a specified time period after a discharge from the same or another hospital. In the PAU measure, readmissions are specified as 30-day, all-payer, all-cause readmissions at the receiving hospital with exclusions for planned admissions. The PAU methodology calculates the percentage of revenue associated with readmissions that occur at the hospital receiving the readmission, regardless of where the original (index) admission occurred.

Hospitalizations for ambulatory-care sensitive conditions are measured by the Agency for Health Care Research and Quality's Prevention Quality Indicators (PQIs). In the PAU measure, PQIs are measured on inpatient admissions and observation stays greater than 23 hours for ambulatory care sensitive conditions. For more information on these measures, see [http://www.qualityindicators.ahrq.gov/modules/pqi\\_overview.aspx](http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx).

## **APPENDIX II. BACKGROUND AND HISTORY OF PAU SAVINGS POLICY**

### **I. Importance of measuring potentially avoidable utilization**

The United States ranks behind most countries on many measures of health outcomes, quality, and efficiency. Physicians may face particular difficulties in receiving timely information, coordinating care, and dealing with administrative burden. Enhancements in chronic care— with a focus on prevention and treatment in the office, home, and long-term care settings—are essential to improving indicators of healthy lives and health equity. As a consequence of inadequate chronic care and care coordination, the healthcare system currently experiences an unacceptably high rate of preventable hospital admissions and readmissions.

### **II. Potentially Avoidable Utilization in the All-Payer Model**

Under the Maryland All-Payer Model, the State aims to demonstrate that an all-payer system with accountability for the total cost of hospital care is an effective model for advancing better care, better health, and reduced costs. A central focus of the All-Payer Model is the reduction of PAU through improved care coordination and enhanced community-based care. While hospitals have achieved significant progress in transforming the delivery system to date, there needs to be continued emphasis on care coordination, improving quality of care, and providing care management, especially for complex and high-needs patients.

A central tenet of the Maryland All-Payer Model is that hospitals are funded under Global Budget Revenue (GBR), which are flexible annual revenue caps. The GBR system assumes that hospitals will reduce potentially avoidable utilization in line with the GBR incentive that allows hospitals to retain a portion of revenue while reducing unnecessary utilization/cost. The PAU Policy prospectively reduces hospital GBRs in anticipation of those cost reductions. All hospitals contribute to the statewide potentially avoidable utilization savings; however, each hospital's reduction is proportional to their percent of potentially avoidable utilization revenue. In contrast to HSCRC's other quality programs that reward or penalize hospitals based on performance, the PAU Savings policy is intentionally designed to assure savings to payers and reduce costs for consumers.

It is also important to note that under the Maryland All-Payer Model, Maryland is exempt from the federal Medicare quality-based payment programs if the aggregate amount of revenue at-risk in Maryland performance-based payment programs is equal to or greater than the aggregate amount of revenue at-risk in the CMS Medicare quality programs. The PAU savings adjustment is one of the performance-based programs used for this comparison.

### **III. History of the Potentially Avoidable Utilization (PAU) Savings Program**

Under the state's previous Medicare waiver, the Commission approved a savings policy on May 1, 2013, which reduced hospital revenues based on case-mix adjusted readmission rates using

specifications from HSCRC's Admission-Readmission Revenue (ARR) Program.<sup>12</sup> Most hospitals in the state participated in the ARR program, which incorporated 30-day readmissions into a hospital episode rate per case, or in the Total Patient Revenue (TPR) system, a global budget for more rural hospital settings. With the implementation of ARR and the advent of global budgets, HSCRC created a policy to ensure payers received similar savings to those that would have been expected from the federal Medicare Hospital Readmissions Reduction Program (HRRP). Unlike the federal program, which provides savings to payers by avoiding readmissions, Maryland requires a separate policy, as global budgets "lock in" savings into hospital budgets. Under the All-Payer Model, the Commission continues to use the savings adjustment to ensure a focus on reducing readmissions, ensure savings to purchasers, and meet exemption requirements for revenue at-risk under Maryland's value-based programs.

For RY14 and RY15, HSCRC calculated hospital-specific case-mix adjusted readmission rates based on ARR specifications for the previous CY.<sup>13</sup> The statewide savings percentage was converted to a required reduction in readmission rates, and each hospital's contribution to savings was determined by its case-mix adjusted readmission rates. Based on a 0.20 percent increase in annual savings, the reduction percentage was 0.40 percent of total revenue in RY15.

In RY16, HSCRC updated the savings reduction methodology to use the case-mix adjusted readmission rate based on Readmissions Reduction Incentive Program (RRIP) specifications.<sup>14</sup> The total reduction percentage was 0.60 percent of total revenue in RY16. The Commission also added a protection capping the revenue reduction at the statewide average for hospitals above the 75th percentile on the percentage of adult Medicaid discharges.

For RY17, the Commission expanded the savings policy to align the measure with the potentially avoidable utilization (PAU) definition, incorporating both readmissions and admissions for ambulatory care sensitive conditions as measured by the Agency for Health Care Research and Quality's Prevention Quality Indicators (PQIs). (See Appendix II for specifications) Aligning the measure with the PAU definition changed the focus of the readmissions measure from "sending" hospitals to "receiving" hospitals. In other words, the updated methodology calculated the percentage of hospital revenue associated with readmissions, regardless of where the original (index) admission occurred. Assigning readmissions to the receiving hospital should incentivize hospitals to work within their service areas to reduce readmissions, regardless of where the index stay took place. Additionally, hospital savings from reducing readmissions will accrue to the receiving hospital. Finally, aligning the readmission measure with the PAU definition enabled the measure to include observation stays above 23 hours in the calculation of readmissions and PQIs. In RY17, the Commission increased the reduction percentage to 1.25% of total revenue.

In RY 2018, the Commission continued the RY17 methodology and increased the amount of the reduction to 1.45% of total revenue.

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<sup>12</sup> A readmission is an admission to a hospital within a specified time period after a discharge from the same or another hospital.

<sup>13</sup> Only same-hospital readmissions were counted, and stays of one day or less and planned admissions were excluded.

<sup>14</sup> This measures 30-day all-cause, all hospital readmissions with planned admission and other exclusions.

### APPENDIX III. ANALYSIS OF PQI TRENDS

PQIs—developed by the Agency for Healthcare Research and Quality—measure inpatient admissions for ambulatory care sensitive conditions. The following figure presents an analysis of the change in PQI discharges between CYs 2016 and 2017 using version 7 of the PQI software for both years.<sup>15</sup> The numbers presented below do not include discharges that were also flagged as a 30-day readmission. From 2016 to 2017, there were improvements in the overall PQI composite (PQI 90) and acute composite (PQI 91), but increases in the chronic composite (PQI 92). Large reductions in community-acquired pneumonia (PQI 11) appear to be driving the acute composite improvement. The diabetes composite (PQI 93) experienced increases, while individual diabetes-related PQIs (PQIs 1, 3, 14, 16) appear to have large fluctuations, suggesting that changes in individual diabetes-related PQIs may reflect coding differences for patients with diabetes rather than a change in admissions.

Appendix III. Figure 1. PQI Trends, CY 2016-CY 2017

PQI Admission Rate	CY16 PQIs	CY17 PQIs	CY16-17 % Change	CY16-17 PQI	CY17 % CONTRIBUTION
	A	B	C=B/A-1	D=B-A	
<b>PQI 90 Overall Composite (Unduplicated)</b>	63505	62328	-1.9%	-1177	100.00%
<b>PQI 91 Acute Composite (PQIs 2, 10, 11, 12)</b>	24310	20857	-14.2%	-3453	33.46%
<b>PQI 92 Chronic Composite (PQIs 1,3,5,7,8,14,15,16)</b>	39197	41475	5.8%	2278	66.54%
<b>PQI 93 Diabetes composites (PQIs 1,3,14,16)</b>	8028	8590	7.0%	562	13.78%
<b>PQI 01 Diabetes Short-Term Complications</b>	2997	1766	-41.1%	-1231	2.83%
<b>PQI 02 Perforated Appendix</b>	1209	1202	-0.6%	-7	1.93%
<b>PQI 03 Diabetes Long-Term Complications</b>	3536	4316	22.1%	780	6.92%
<b>PQI 05 COPD or Asthma in Older Adults</b>	12909	14041	8.8%	1132	22.53%
<b>PQI 07 Hypertension</b>	2320	3206	38.2%	886	5.14%
<b>PQI 08 Heart Failure</b>	15014	14734	-1.9%	-280	23.64%
<b>PQI 10 Dehydration</b>	7372	7022	-4.7%	-350	11.27%
<b>PQI 11 Community-Acquired Pneumonia</b>	9207	6845	-25.7%	-2362	10.98%
<b>PQI 12 Urinary Tract Infection</b>	7731	6990	-9.6%	-741	11.21%
<b>PQI 14 Uncontrolled Diabetes</b>	2196	2048	-6.7%	-148	3.29%
<b>PQI 15 Asthma in Younger Adults</b>	928	905	-2.5%	-23	1.45%
<b>PQI 16 Lower-Extremity Amputation among Patients w/ Diabetes</b>	859	1006	17.1%	147	1.61%

<sup>15</sup> AHRQ updated to PQI software version 7 in October 2017. The major changes in version 7 include a correction to an incorrect decrease in PQI 07 (Hypertension) under ICD-10.

**APPENDIX IV. PERCENT OF REVENUE IN PAU BY HOSPITAL**

The following figure presents the preliminary total non-PAU revenue for each hospital, total PAU revenue by PAU category (PQI, readmissions, and total), total hospital revenue, and PAU as a percentage of total hospital revenue for CY 2017. Overall, PAU revenue comprised 11.00 percent of total statewide hospital revenue.

**Appendix IV. Figure 1. PAU Percentage of Total Revenue by Hospital, CY 2017**

Hosp ID	Hospital Name	Non-PAU Revenue A	Readmission Revenue B	PQI Revenue C	Total PAU Revenue D=B+C	Total Hospital Revenue E=A+D	% Readmission F=B/E	% PQI G=C/E	% PAU H=F+G
210001	Meritus	\$285,635,783	\$25,133,325	\$19,360,795	\$44,494,120	\$330,129,902	7.61%	5.86%	13.48%
210002	UMMC	\$1,508,208,262	\$105,633,803	\$32,837,109	\$138,470,912	\$1,646,679,175	6.41%	1.99%	8.41%
210003	UM-PGHC	\$257,166,795	\$26,032,263	\$15,523,672	\$41,555,934	\$298,722,730	8.71%	5.20%	13.91%
210004	Holy Cross	\$456,540,898	\$37,974,537	\$17,771,656	\$55,746,193	\$512,287,091	7.41%	3.47%	10.88%
210005	Frederick	\$301,668,381	\$26,139,960	\$23,078,215	\$49,218,175	\$350,886,556	7.45%	6.58%	14.03%
210006	UM-Harford	\$88,978,098	\$10,527,917	\$7,108,832	\$17,636,749	\$106,614,847	9.87%	6.67%	16.54%
210008	Mercy	\$502,751,428	\$18,289,611	\$9,991,886	\$28,281,497	\$531,032,925	3.44%	1.88%	5.33%
210009	Johns Hopkins	\$2,204,647,494	\$168,753,132	\$47,311,261	\$216,064,393	\$2,420,711,887	6.97%	1.95%	8.93%
210010	UM-Dorchester	\$41,315,427	\$4,373,241	\$3,726,824	\$8,100,065	\$49,415,493	8.85%	7.54%	16.39%
210011	St Agnes	\$368,998,271	\$35,227,134	\$28,156,897	\$63,384,031	\$432,382,302	8.15%	6.51%	14.66%
210012	Sinai	\$708,583,403	\$42,755,341	\$26,496,911	\$69,252,252	\$777,835,655	5.50%	3.41%	8.90%
210013	Bon Secours	\$86,290,727	\$15,222,821	\$6,306,890	\$21,529,711	\$107,820,438	14.12%	5.85%	19.97%
210015	MedStar Fr Sq	\$446,053,268	\$44,458,713	\$31,801,020	\$76,259,733	\$522,313,001	8.51%	6.09%	14.60%
210016	Wash Adventist	\$235,717,043	\$21,274,073	\$15,251,230	\$36,525,303	\$272,242,346	7.81%	5.60%	13.42%
210017	Garrett	\$50,771,448	\$1,441,521	\$2,951,096	\$4,392,618	\$55,164,066	2.61%	5.35%	7.96%
210018	MedStar Mont	\$158,627,803	\$13,161,523	\$8,562,915	\$21,724,438	\$180,352,241	7.30%	4.75%	12.05%
210019	Peninsula	\$400,062,315	\$28,311,939	\$18,732,668	\$47,044,607	\$447,106,921	6.33%	4.19%	10.52%
210022	Suburban	\$284,225,507	\$19,974,015	\$11,474,076	\$31,448,091	\$315,673,599	6.33%	3.63%	9.96%
210023	Anne Arundel	\$563,963,503	\$28,055,312	\$25,670,593	\$53,725,904	\$617,689,407	4.54%	4.16%	8.70%

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Hosp ID	Hospital Name	Non-PAU Revenue A	Readmission Revenue B	PQI Revenue C	Total PAU Revenue D=B+C	Total Hospital Revenue E=A+D	% Readmission F=B/E	% PQI G=C/E	% PAU H=F+G
210024	MedStar Union	\$386,130,697	\$29,198,790	\$21,958,089	\$51,156,878	\$437,287,575	6.68%	5.02%	11.70%
210027	Western MD	\$293,906,629	\$21,467,836	\$15,943,973	\$37,411,809	\$331,318,439	6.48%	4.81%	11.29%
210028	MedStar St Mary's	\$169,323,830	\$10,878,237	\$12,607,911	\$23,486,148	\$192,809,978	5.64%	6.54%	12.18%
210029	JH Bayview	\$577,888,000	\$48,978,507	\$27,988,007	\$76,966,514	\$654,854,514	7.48%	4.27%	11.75%
210030	UM-Chestertown	\$50,476,187	\$3,770,763	\$2,959,617	\$6,730,380	\$57,206,567	6.59%	5.17%	11.77%
210032	Union of Cecil	\$142,783,495	\$9,029,343	\$9,869,614	\$18,898,957	\$161,682,452	5.58%	6.10%	11.69%
210033	Carroll	\$196,283,058	\$19,719,790	\$19,221,881	\$38,941,671	\$235,224,728	8.38%	8.17%	16.56%
210034	MedStar Harbor	\$166,678,135	\$18,508,974	\$11,866,820	\$30,375,794	\$197,053,929	9.39%	6.02%	15.41%
210035	UM-Charles	\$132,285,309	\$10,199,409	\$8,876,416	\$19,075,825	\$151,361,134	6.74%	5.86%	12.60%
210037	UM-Easton	\$187,936,924	\$11,959,083	\$7,130,502	\$19,089,585	\$207,026,509	5.78%	3.44%	9.22%
210038	UMMC Midtown	\$205,010,123	\$22,137,629	\$12,508,789	\$34,646,418	\$239,656,541	9.24%	5.22%	14.46%
210039	Calvert	\$131,851,278	\$7,432,032	\$9,381,184	\$16,813,217	\$148,664,495	5.00%	6.31%	11.31%
210040	Northwest	\$220,634,165	\$20,973,251	\$20,983,989	\$41,957,240	\$262,591,404	7.99%	7.99%	15.98%
210043	UM-BWMC	\$359,937,624	\$35,289,232	\$25,385,675	\$60,674,906	\$420,612,531	8.39%	6.04%	14.43%
210044	GBMC.	\$436,186,478	\$21,761,845	\$14,941,737	\$36,703,582	\$472,890,060	4.60%	3.16%	7.76%
210045	McCready	\$16,060,388	\$395,109	\$1,007,695	\$1,402,804	\$17,463,192	2.26%	5.77%	8.03%
210048	Howard County	\$269,141,884	\$23,253,196	\$15,978,249	\$39,231,445	\$308,373,330	7.54%	5.18%	12.72%
210049	UM-UCH	\$306,611,923	\$21,116,740	\$16,547,776	\$37,664,516	\$344,276,439	6.13%	4.81%	10.94%
210051	Doctors	\$196,035,947	\$22,818,963	\$18,452,713	\$41,271,676	\$237,307,623	9.62%	7.78%	17.39%
210055	UM-Laurel	\$90,514,175	\$6,139,260	\$4,720,686	\$10,859,945	\$101,374,120	6.06%	4.66%	10.71%
210056	MedStar Good Sam	\$247,584,496	\$28,568,836	\$22,314,062	\$50,882,898	\$298,467,394	9.57%	7.48%	17.05%
210057	Shady Grove	\$359,105,683	\$27,052,951	\$15,010,190	\$42,063,140	\$401,168,823	6.74%	3.74%	10.49%
210058	UMROI	\$125,099,231	\$124,314		\$124,314	\$125,223,545	0.10%	0.00%	0.10%
210060	Ft. Washington	\$41,616,978	\$2,492,557	\$4,544,704	\$7,037,260	\$48,654,238	5.12%	9.34%	14.46%
210061	Atlantic General	\$98,901,133	\$4,484,808	\$5,473,522	\$9,958,330	\$108,859,464	4.12%	5.03%	9.15%

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Hosp ID	Hospital Name	Non-PAU Revenue A	Readmission Revenue B	PQI Revenue C	Total PAU Revenue D=B+C	Total Hospital Revenue E=A+D	% Readmission F=B/E	% PQI G=C/E	% PAU H=F+G
210062	MedStar Southern	\$226,782,753	\$24,750,327	\$20,738,341	\$45,488,667	\$272,271,421	9.09%	7.62%	16.71%
210063	UM-St. Joseph	\$384,002,900	\$20,708,579	\$11,795,139	\$32,503,718	\$416,506,618	4.97%	2.83%	7.80%
210064	Levindale	\$54,110,621	\$4,174,995		\$4,174,995	\$58,285,616	7.16%	0.00%	7.16%
210065	HC-Germantown	\$84,357,920	\$7,153,030	\$5,277,822	\$12,430,852	\$96,788,772	7.39%	5.45%	12.84%
	<b>STATEWIDE</b>	<b>\$15,149,341,051</b>	<b>\$1,157,278,565</b>	<b>\$715,599,646</b>	<b>\$1,872,878,211</b>	<b>\$17,022,219,263</b>	6.80%	4.20%	11.00%

**APPENDIX V. Modeling Results Proposed PAU Savings Policy Reductions for RY 2019**

The following figure presents the proposed PAU savings adjustments for each hospital for RY 2019. The hospital’s CY17 PAU percent (column B) is multiplied by the statewide required percent revenue adjustment (statewide proposed revenue reduction divided by the statewide CY17 PAU %) to calculate the RY19 PAU Savings Adjustment before protections (columns C and D). If hospitals are in the top quartile of hospitals with equivalent case-mix adjusted discharges of Medicaid, Self-Pay, and Charity (column E), the adjustment is capped at the statewide average reduction. The RY19 PAU Savings Adjustments after protections (columns F and G) are then adjusted to account for the additional revenue reductions necessary to match the statewide revenue reduction (columns H and I). Because last year’s revenue reductions are reversed (column J) and the new PAU adjustments are entered into the update factor, the difference between the RY19 and RY18 revenue adjustments represent the net revenue impact to the RY19 update factor. (Columns K and L). For some hospitals, the net RY19 revenue adjustment may not be negative when the RY18 adjustment is reversed and the RY19 adjustment is included.

**Appendix V. Figure 1. Proposed PAU Savings Policy Reductions for RY 2019, by Hospital**

Hosp ID	Hospital Name	RY18 Permanent Total Revenue (\$)	CY17 PAU %	RY19 PAU Savings Adj.	RY19 PAU Savings Adj. Before Protections	CY17 % ECMAD IP Medicaid/ Self-Pay Charity	RY19 PAU Adj. w/ Protection (%)	RY19 PAU Adj. w/ Protections Revenue (\$)	RY19 PAU Adj. w/ Protections Revenue (\$)	RY19 PAU Adj. w/ Protections Revenue (\$)	RY19 PAU Adj. w/ Protection (%)	RY18 PAU Savings Adj. w/ Protection (\$)	Net RY19 Revenue Impact (%)	Net RY19 Revenue Impact (\$)
		A	B	C=B* -15.91 <sup>16</sup>	D = A*C	E	F	G = A*F	H=G + (0.06%*A) <sup>17</sup>	I=H/A	J	K = (H-G)/A	L=K*C	
210001	Meritus	\$321,955,560	13.48%	-2.14%	-\$6,901,737	19.00%	-2.14%	-\$6,901,737	-\$7,083,787	-2.20%	-\$5,520,664	-0.49%	-\$1,563,094	
210002	UMMC	\$1,399,559,924	8.41%	-1.34%	\$18,719,134	30.59%	-1.34%	\$18,719,134	\$19,510,514	-1.39%	\$13,498,782	-0.43%	-\$6,011,110	
210003	UM-PGHC	\$287,707,710	13.91%	-2.21%	-\$6,365,917	43.10%	-1.75%	-\$5,034,885	-\$5,197,569	-1.81%	-\$4,324,396	-0.30%	-\$873,193	
210004	Holy Cross	\$489,724,686	10.88%	-1.73%	-\$8,476,147	22.46%	-1.73%	-\$8,476,147	-\$8,753,062	-1.79%	-\$7,893,731	-0.18%	-\$859,467	
210005	Frederick	\$338,085,918	14.03%	-2.23%	-\$7,542,765	7.41%	-2.23%	-\$7,542,765	-\$7,733,936	-2.29%	-\$5,067,592	-0.79%	-\$2,666,484	
210006	UM-Harford	\$102,314,327	16.54%	-2.63%	-\$2,692,043	18.38%	-2.63%	-\$2,692,043	-\$2,749,897	-2.69%	-\$2,524,681	-0.22%	-\$225,194	
210008	Mercy	\$516,410,170	5.33%	-0.85%	-\$4,374,419	24.93%	-0.85%	-\$4,374,419	-\$4,666,423	-0.90%	-\$3,663,552	-0.19%	-\$1,002,869	

<sup>16</sup> Required % revenue adjustment in PAU revenue= Savings (-1.75%) / % PAU (11.00%) = -15.91%

<sup>17</sup> Adjustment to ensure statewide reduction after protection = -1.75 – -1.69% = -0.06%

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Hosp ID	Hospital Name	RY18 Permanent Total Revenue (\$)	CY17 PAU %	RY19 PAU Savings Adj.	RY19 PAU Savings Adj. Before Protections	CY17 % ECMAD IP Medicaid/ Self-Pay Charity	RY19 PAU Adj. w/ Protection (%)	RY19 PAU Adj. w/ Protections Revenue (\$)	RY18 PAU Savings Adj. w/ Protection (\$)	Net RY19 Revenue Impact (%)	Net RY19 Revenue Impact (\$)			
		A	B	C=B* -15.91 <sup>16</sup>	D = A*C	E	F	G = A*F	H=G + (0.06%*A) <sup>17</sup>	I=H/A	J	K = (H-G)/A	L=K*C	
210009	Hopkins	\$2,352,963,223	8.93%	-1.42%	\$33,404,112	23.40%	-1.42%	\$33,404,112	\$34,734,594	-1.48%	\$26,672,300	-0.34%	-\$8,061,252	
210010	Dorchester	\$49,226,292	16.39%	-2.61%	-\$1,283,415	25.53%	-1.75%	-\$861,460	-\$889,295	-1.81%	-\$725,744	-0.33%	-\$163,530	
210011	St Agnes	\$422,820,202	14.66%	-2.33%	-\$9,858,535	23.66%	-2.33%	-\$9,858,535	\$10,097,618	-2.39%	-\$8,072,607	-0.48%	-\$2,024,886	
210012	Sinai	\$752,409,746	8.90%	-1.42%	\$10,654,796	24.29%	-1.42%	\$10,654,796	\$11,080,246	-1.47%	-\$9,124,538	-0.26%	-\$1,955,513	
210013	Bon Secours	\$115,902,722	19.97%	-3.18%	-\$3,681,081	60.30%	-1.75%	-\$2,028,298	-\$2,093,835	-1.81%	-\$1,723,772	-0.32%	-\$370,077	
210015	Franklin Sq	\$522,059,009	14.60%	-2.32%	\$12,123,520	27.09%	-1.75%	-\$9,136,033	-\$9,431,231	-1.81%	-\$7,430,356	-0.38%	-\$2,001,052	
210016	Wash Adventist	\$265,729,172	13.42%	-2.13%	-\$5,670,509	30.89%	-1.75%	-\$4,650,261	-\$4,800,517	-1.81%	-\$3,898,038	-0.34%	-\$902,416	
210017	Garrett	\$54,328,266	7.96%	-1.27%	-\$688,078	16.09%	-1.27%	-\$688,078	-\$718,798	-1.32%	-\$605,944	-0.21%	-\$112,840	
210018	Montgomery	\$172,101,071	12.05%	-1.92%	-\$3,297,276	15.60%	-1.92%	-\$3,297,276	-\$3,394,590	-1.97%	-\$2,812,121	-0.34%	-\$582,390	
210019	Peninsula	\$431,713,670	10.52%	-1.67%	-\$7,225,018	18.08%	-1.67%	-\$7,225,018	-\$7,469,130	-1.73%	-\$6,792,718	-0.16%	-\$676,495	
210022	Suburban	\$313,631,832	9.96%	-1.58%	-\$4,969,593	8.62%	-1.58%	-\$4,969,593	-\$5,146,936	-1.64%	-\$4,484,669	-0.21%	-\$662,390	
210023	Anne Arundel	\$609,013,273	8.70%	-1.38%	-\$8,425,293	12.05%	-1.38%	-\$8,425,293	-\$8,769,659	-1.44%	-\$6,881,944	-0.31%	-\$1,887,941	
210024	Union Mem	\$421,547,476	11.70%	-1.86%	-\$7,843,828	19.08%	-1.86%	-\$7,843,828	-\$8,082,192	-1.92%	-\$5,756,652	-0.55%	-\$2,325,677	
210027	Western MD	\$320,642,519	11.29%	-1.80%	-\$5,758,759	14.49%	-1.80%	-\$5,758,759	-\$5,940,066	-1.85%	-\$4,712,416	-0.38%	-\$1,227,740	
210028	St Mary's	\$177,161,733	12.18%	-1.94%	-\$3,432,392	19.88%	-1.94%	-\$3,432,392	-\$3,532,568	-1.99%	-\$2,736,037	-0.45%	-\$796,519	
210029	JH Bayview	\$647,476,458	11.75%	-1.87%	\$12,103,909	29.09%	-1.75%	\$11,330,838	\$11,696,953	-1.81%	-\$9,362,447	-0.36%	-\$2,334,800	
210030	Chestertown	\$55,473,722	11.77%	-1.87%	-\$1,038,068	12.42%	-1.87%	-\$1,038,068	-\$1,069,436	-1.93%	-\$1,117,206	0.09%	\$47,763	

Final Recommendations for the RY19 Potentially Avoidable Utilization Savings Policy

Hosp ID	Hospital Name	RY18 Permanent Total Revenue (\$)	CY17 PAU %	RY19 PAU Savings Adj.	RY19 PAU Savings Adj. Before Protections	CY17 % ECMAD IP Medicaid/ Self-Pay Charity	RY19 PAU Adj. w/ Protection (%)	RY19 PAU Adj. w/ Protections Revenue (\$)	RY19 PAU Adj. w/ Protections Revenue (\$)	RY19 PAU Adj. w/ Protections Revenue (\$)	RY19 PAU Adj. w/ Protection (%)	RY18 PAU Savings Adj. w/ Protection (\$)	Net RY19 Revenue Impact (%)	Net RY19 Revenue Impact (\$)
		A	B	C=B* -15.91 <sup>16</sup>	D = A*C	E	F	G = A*F	H=G + (0.06%*A) <sup>17</sup>	I=H/A	J	K = (H-G)/A	L=K*C	
210032	Union Cecil	\$158,683,870	11.69%	-1.86%	-\$2,950,207	26.69%	-1.75%	-\$2,776,968	-\$2,866,696	-1.81%	-\$2,359,447	-0.32%	-\$507,312	
210033	Carroll	\$225,263,359	16.56%	-2.63%	-\$5,931,532	13.86%	-2.63%	-\$5,931,532	-\$6,058,907	-2.69%	-\$4,341,595	-0.76%	-\$1,717,408	
210034	Harbor	\$186,978,444	15.41%	-2.45%	-\$4,584,361	32.62%	-1.75%	-\$3,272,123	-\$3,377,850	-1.81%	-\$2,874,192	-0.27%	-\$503,720	
210035	UM-Charles	\$148,909,451	12.60%	-2.00%	-\$2,984,942	18.01%	-2.00%	-\$2,984,942	-\$3,069,143	-2.06%	-\$2,803,843	-0.18%	-\$265,357	
210037	UM-Easton	\$202,561,563	9.22%	-1.47%	-\$2,970,792	17.31%	-1.47%	-\$2,970,792	-\$3,085,330	-1.52%	-\$3,096,495	0.01%	\$11,141	
210038	UMMC Midtown	\$234,227,770	14.46%	-2.30%	-\$5,385,824	42.17%	-1.75%	-\$4,098,986	-\$4,231,430	-1.81%	-\$3,442,404	-0.34%	-\$789,113	
210039	Calvert	\$143,263,199	11.31%	-1.80%	-\$2,577,050	16.67%	-1.80%	-\$2,577,050	-\$2,658,058	-1.86%	-\$2,244,537	-0.29%	-\$413,458	
210040	Northwest	\$255,493,814	15.98%	-2.54%	-\$6,493,091	21.66%	-2.54%	-\$6,493,091	-\$6,637,560	-2.60%	-\$5,594,125	-0.41%	-\$1,043,437	
210043	UM-BWMC	\$409,703,662	14.43%	-2.29%	-\$9,400,294	17.57%	-2.29%	-\$9,400,294	-\$9,631,961	-2.35%	-\$8,105,616	-0.37%	-\$1,526,146	
210044	GBMC.	\$442,204,396	7.76%	-1.23%	-\$5,459,037	10.41%	-1.23%	-\$5,459,037	-\$5,709,081	-1.29%	-\$5,312,059	-0.09%	-\$397,100	
210045	McCready	\$15,618,329	8.03%	-1.28%	-\$199,550	14.76%	-1.28%	-\$199,550	-\$208,381	-1.33%	-\$208,250	0.00%	-\$125	
210048	Howard	\$298,460,107	12.72%	-2.02%	-\$6,039,326	15.65%	-2.02%	-\$6,039,326	-\$6,208,090	-2.08%	-\$5,035,913	-0.39%	-\$1,172,053	
210049	UM-UCH	\$334,751,759	10.94%	-1.74%	-\$5,824,956	11.51%	-1.74%	-\$5,824,956	-\$6,014,241	-1.80%	-\$4,909,071	-0.33%	-\$1,105,016	
210051	Doctors	\$239,227,750	17.39%	-2.77%	-\$6,617,541	18.97%	-2.77%	-\$6,617,541	-\$6,752,812	-2.82%	-\$5,306,892	-0.60%	-\$1,445,893	
210055	UM-Laurel	\$99,871,376	10.71%	-1.70%	-\$1,701,713	29.71%	-1.70%	-\$1,701,713	-\$1,758,185	-1.76%	-\$1,484,000	-0.27%	-\$274,147	
210056	Good Sam	\$264,597,392	17.05%	-2.71%	-\$7,174,724	20.41%	-2.71%	-\$7,174,724	-\$7,324,340	-2.77%	-\$5,845,659	-0.56%	-\$1,478,570	
210057	Shady Grove	\$387,674,359	10.49%	-1.67%	-\$6,465,264	19.52%	-1.67%	-\$6,465,264	-\$6,684,474	-1.72%	-\$5,160,898	-0.39%	-\$1,523,560	
210058	UMROI	\$120,638,692	0.10%	-0.02%	-\$19,049	24.39%	-0.02%	-\$19,049	-\$87,264	-0.07%	-\$8,357	-0.07%	-\$78,898	
210060	Ft. Wash	\$48,244,588	14.46%	-2.30%	-\$1,109,881	18.55%	-2.30%	-\$1,109,881	-\$1,137,161	-2.36%	-\$1,010,796	-0.26%	-\$126,353	
210061	AGH	\$105,151,502	9.15%	-1.46%	-\$1,529,962	12.85%	-1.46%	-\$1,529,962	-\$1,589,420	-1.51%	-\$1,180,344	-0.39%	-\$409,039	
210062	Southern MD	\$271,260,318	16.71%	-2.66%	-\$7,208,288	21.35%	-2.66%	-\$7,208,288	-\$7,361,672	-2.71%	-\$5,817,602	-0.57%	-\$1,544,014	

Final Recommendations for the RY19 Potentially Avoidable Utilization Savings Policy

Hosp ID	Hospital Name	RY18 Permanent Total Revenue (\$)	CY17 PAU %	RY19 PAU Savings Adj.	RY19 PAU Savings Adj. Before Protections	CY17 % ECMAD IP Medicaid/ Self-Pay Charity	RY19 PAU Adj. w/ Protection (%)	RY19 PAU Adj. w/ Protections Revenue (\$) normalized to statewide average	RY19 PAU Adj. w/ Protection (%)	RY18 PAU Savings Adj. w/ Protection (\$)	Net RY19 Revenue Impact (%)	Net RY19 Revenue Impact (\$)			
		A	B	C=B* -15.91 <sup>16</sup>	D = A*C	E	F	G = A*F	H=G + (0.06%*A) <sup>17</sup>	I=H/A	J	K = (H-G)/A	L=K*C		
210063	UM-St. Joes	\$398,711,781	7.80%	-1.24%	-\$4,948,971	11.49%	-1.24%	-\$4,948,971	-\$5,174,422	-1.30%	-\$4,623,341	-0.14%	-\$551,020		
210064	Levindale	\$58,867,710	7.16%	-1.14%	-\$670,682	5.70%	-1.14%	-\$670,682	-\$703,969	-1.20%	-\$611,430	-0.16%	-\$92,540		
210065	HC-German	\$102,303,760	12.84%	-2.04%	-\$2,089,836	22.10%	-2.04%	-\$2,089,836	-\$2,147,684	-2.10%	-\$1,649,332	-0.49%	-\$498,322		
<b>Total</b>	<b>Total</b>	<b>16,292,627,632</b>	<b>11.00%</b>	<b>-1.75%</b>	<b>285,120,984</b>	<b>21.05%</b>	<b>-1.69%</b>	<b>275,882,670</b>	<b>285,120,984</b>	<b>-1.75%</b>	<b>-28,429,107</b>	<b>-0.35%</b>	<b>-56,698,344</b>		
Top Quartile=						24.53%									

Percentages have been rounded for display but full numbers may be used in calculations. Final scaling percentages are rounded to two decimal places.

## Supplemental Report on Efforts to Modernize PAU Measurement and Adjustment in Future Years

This supplemental report will provide additional context on three main areas of concern as staff works to modernize the PAU measurement and adjustment in future years: A) HSCRC Expansion/Refinement of PAU Measure; B) Hospital-defined PAU; and C) Savings Protections for individual hospitals

### Future Expansion and Refinement of PAU

#### Future Expansion and Refinement of PAU

The Potentially Avoidable Utilization (PAU) measure is an indicator of hospital spending and services that may be avoidable with high-value care throughout the healthcare system. To date, the PAU measure has focused on the specific outcomes that may result from the underuse of high-value primary care and community health, as measured through preventable admissions (Prevention Quality Indicators (PQIs)) and readmissions. While the current PAU methodology quantifies about 11% of hospital revenue as associated with potentially avoidable utilization, research estimates indicate as much as 25-30% of total medical care spending is unnecessary or wasteful.<sup>18</sup> Although hospital care is a smaller subset of total medical care, this research indicates there are significant domains of hospital spending that remain unmeasured in the current PAU measure, including overuse of potentially low value care and additional outcomes of underuse of high value care.<sup>19</sup> Given this literature and stakeholder feedback, HSCRC staff plans to explore the measurement of PAU to capture a larger, more comprehensive amount of use/revenue.

In addition to expanding PAU, it is important to reassess and refine the existing measures and revenue captured in PAU. PQIs and readmissions encompass \$1.8 billion in hospital revenue annually in Maryland, and reflect the outcomes of care fragmentation and lack of coordination between hospitals and community providers. Improvements and alignment in care delivery between these historically separate groups are crucial for reducing this potentially preventable utilization and for success in the All-Payer Model. While hospitals have achieved significant progress in transforming the delivery system to date, there must be a continued emphasis on readmissions and PQIs ensures focus on care coordination, improving quality of care, and providing care management for complex and high-needs patients. For these reasons, staff has continued to recommend the use of PQIs and readmissions in PAU as measures of coordination between hospitals, primary care, and communities. However, as part of the PAU expansion efforts, HSCRC staff plans to explore stakeholder concerns around how PQIs are implemented in PAU Savings and potentially refine the measure use.

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<sup>18</sup> Berwick DM, Hackbarth AD. Eliminating Waste in US Health Care. *JAMA*. 2012;307(14):1513–1516.

<sup>19</sup> Mafi, John N., et al. "Association of primary care practice location and ownership with the provision of low-value care in the United States." *JAMA internal medicine* 177.6 (2017): 838-845.

## Initial Considerations, Research, and Outreach

Staff has solicited initial input on PAU expansion from the Performance Measurement Workgroup, Consumer Standing Advisory Committee, measurement experts, and others. Based on those initial conversations, as well as other items mentioned in the Commissioner white paper,<sup>20</sup> a number of initial important principles have emerged for future measurement of PAU. An updated PAU measure should:

- Continue to be measured on an all-payer basis
- Be nationally recognized or used in other programs/states
- Be supported by clinical recommendations, consumer advocacy groups, and the medical and economic literature.
- Incorporate a significant amount of revenue
- Consider how PAU is used in multiple Commission policies. Not all measures that may be under consideration for PAU can be directly linked to revenue.
- Prioritize aligning measures with outcomes of existing or planned hospital avoidable use initiatives, rather than requiring new programs to target the measure

## Potential Domains of PAU Measurement

**Low Value Care.** Broadening the PAU measure to encompass potentially low value care emphasizes reducing medical care that may have little or no net benefit (or even potentially cause harm),<sup>21</sup> rather than on the upstream prevention of clinical need. Harms can include inappropriate treatment, false positives, clinical risks, and unnecessary consumer and delivery system cost. While doctors and clinical specialties have begun to identify potentially low value services through the Choosing Wisely initiatives, potentially low value care is still a significant component of cost in the overall healthcare system, estimated to be around \$340 billion in 2009.<sup>22</sup> Consumer groups generally support measurement of low value, but there is also a recognition that the definition of “value” may vary from individual to individual and what is inappropriate for one patient may be appropriate for another.<sup>23,24</sup> Because of these concerns, it may make sense to focus first on well-defined measures that are shown to have little or no clinical value and that the global budget system already incentivizes hospitals to reduce. This approach could allow the Commission to identify problematic patterns of low value care while

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<sup>20</sup> <http://www.hscrc.maryland.gov/Documents/December%202017%20Post%20Meeting%20Materials.pdf>

<sup>21</sup> IOM (Institute of Medicine). *Crossing the Quality Chasm: a New Health System for the 21st Century*. Washington, D.C.: National Academy Press; 2001.

<sup>22</sup> Institute of Medicine. 2013. *Best Care at Lower Cost: the Path to Continuously Learning Health Care in America*. Washington, D.C.: National Academies Press; 2013.

<sup>23</sup> Schlesinger M, Grob R. Treating, Fast and Slow: Americans' Understanding of and Responses to Low-Value Care. *The Milbank Quarterly*. 2017;95(1):70-116. doi:10.1111/1468-0009.12246.

<sup>24</sup> Brownlee, S. and Berman, A. *Defining Value in Health Care Resource Utilization: Articulating the Role of the Patient*. John T Harford Foundation; 2016.

limiting unintended consequences.<sup>25</sup> It also may be more appropriate to measure potentially low value care as rates or as a global measure of overuse, which may not directly link to revenue.<sup>26</sup> As part of this process, HSCRC plans to explore existing composite tools, such as the Johns Hopkins Overuse Index<sup>27</sup> and the MedInsight Health Waste Calculator.<sup>28</sup> The measures selected should represent a significant amount of potentially avoidable spending, regardless of whether the measurement is based on performance rates or revenue.

**High Value Care.** Enhancements in chronic care— with a focus on prevention and treatment in the office, home, and long-term care settings—are essential to improving indicators of healthy lives and health equity. Success in the global budget setting relies on patients receiving care in the appropriate settings; therefore, a central focus of the All-Payer Model is the reduction of hospital utilization through improved care coordination and enhanced community-based care. The current measure of PAU focuses on preventing the need for hospitalizations through improved management in the community, but it does not comprehensively cover all populations or settings of care. For example, measures could be added to reflect innovative community-hospital partnerships for specific populations, such as physician rounding to prevent hospitalizations from nursing home or long-term care patients. For settings of care, Maryland hospitals may be investing in emergency department navigator programs to connect patients with primary care providers, but prevention quality indicators may not capture all of the avoided revenue from these efforts.

### Refinements to current measure

While HSCRC continues to recommend the use of PQIs and readmissions, staff plans to examine PAU measurement in future years to address stakeholder measurement concerns, in particular relating to the use of PQIs. As originally specified by the Agency for Healthcare Research and Quality, PQIs were intended to capture population-level differences in care quality per 100,000 residents. The PAU Savings Policy uses the same logic and code to identify PQIs; however, the policy compares the hospital revenue associated with these admissions with total hospital revenue. Stakeholders have noted that it may not be appropriate to use hospital revenue as the comparison, given that effective efforts to reduce PQIs may actually lead to less hospital

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<sup>25</sup> Bhatia RS, Levinson W, Shortt S, et al. Measuring the effect of Choosing Wisely: an integrated framework to assess campaign impact on low-value care. *BMJ Quality & Safety*. 2015;24(8):523-531. doi:10.1136/bmjqs-2015-004070.

<sup>26</sup> Segal JB, Nassery N, Chang HY, Chang E, Chan K, Bridges JF. An index for measuring overuse of health care resources with Medicare claims. *Med Care*. 2015 Mar;53(3):230-6.

<sup>27</sup> Ibid.

<sup>28</sup> MedInsight calculator was used in all payers claims databases in both Washington and Virginia to assess the cost of unnecessary services.

Washington: Washington Health Alliance. First Do No Harm: Calculating Health Care Waste in Washington State. Feb 2018. Available at <https://www.wacommunitycheckup.org/media/47156/2018-first-do-no-harm.pdf>.

Virginia: Mafi JN, Russell K, Bortz BA, Dachary M, Hazel WA Jr, Fendrick AM. Low-Cost, High-Volume Health Services Contribute The Most To Unnecessary Health Spending. *Health Aff (Millwood)*. 2017 Oct 1;36(10):1701-1704.

spending, i.e., a reduced denominator. This issue is somewhat mitigated in Maryland by the fact that the state operates in a GBR hospital system.

However, staff acknowledges measurement issues may remain and some issues that initially prevented a population-based approach may now be surmountable. In the time since PQIs were initially implemented, the Total Cost of Care Workgroup has developed a method of attributing responsibility for Maryland residents' utilization and spending to hospitals based on geographic attribution, known as Primary Service Area-Plus (PSA-Plus). PSA-plus is based on hospital primary service areas as indicated in global budget revenue agreements plus enhancements to ensure full geographic coverage for the state. The Commission can explore using this geographic method in PAU as a population-level denominator for readmissions and PQIs. However, this change might require a shift from a revenue-based measure to a discharge-per capita measure, which would require additional steps to translate to revenue. If discharge approach is used for PAU savings, a different PAU measures may be needed for the Market Shift adjustment, as this relies on actual revenue changes.

## Next Steps

As presented to the Performance Measurement Work Group in the March and April meetings, HSCRC staff plans to implement any additional measurement of PAU for the calendar year 2019 performance period, effective for payment adjustments in RY2021. This timeline allows for development and testing additional measures before the performance period in which those measures would be applied.

In May and June, staff expects to receive additional comments on PAU expansion from the Commission and stakeholders through the draft and final submission of the RY2019 PAU Savings Policy. Staff plans to perform analyses and solicit continual input on RY2021 specific measures and their feasibility throughout the summer and fall, and staff intends to start reporting measures for potential use in Fall 2018. This will allow stakeholders to become familiar with and help refine the measures prior to the CY 2019 performance period. Ongoing stakeholder engagement is crucial to effective expansion and refinement of PAU, with collaboration and input from consumers, hospitals, clinicians, and payers through HSCRC workgroups as well as formal and informal presentations and comment periods.

## Hospital-defined PAU Measurement

### Hospital defined PAU measurement

As an element of alignment with hospitals, the Commissioner White Paper from November 2017 proposed that hospitals be allowed to submit their own measurement of PAU. Under this approach, hospitals could submit proposals for PAU programs as an alternative to the standard PAU Savings Policy. The proposals would need to be approved by HSCRC and would be required to meet guidelines set out by the HSCRC, which could include elements such as being

grounded in the medical and economic literature and demonstrate strong physician leadership. In addition, hospitals would need to present an implementation plan to achieve expected reductions in PAU.

## Initial Considerations, Outreach, and Research

HSCRC staff has requested preliminary input on hospital-defined PAU approaches and incorporated many of the guidelines outlined in the White Paper in the considerations for PAU Expansion. With input from hospitals and other stakeholders, the collaborative process around PAU expansion should better reflect hospital efforts to reduce PAU and lessen the need for unique hospital-defined PAU. Staff believes that this approach, or alternatives using the guidelines outlined in the White Paper in a different way, such as necessary criteria for hospitals to request rate reviews, may achieve similar purposes as hospital-defined PAU with less burden for both hospitals and Commission staff.

Staff has summarized some practical concerns around implementing the suggested hospital-specific PAU in the PAU Savings Program below:

- The Commission may also want to consider the potential feasibility of evaluating unique proposals for all Maryland acute hospitals. Monitoring changes and updates to measure specifications for the HSCRC statewide programs already takes up a significant amount of staff resources. Even if hospitals submitted their own measure monitoring and proposed updates, staff would be required to evaluate each measure change to ensure it was valid, or not allow any measure updates throughout the year, which would not be appropriate in many cases.
- As currently structured, the PAU Savings Policy uses relative ranking of hospitals to determine hospital-specific scaling of the PAU Savings adjustment. Therefore, it would be necessary to redesign the PAU Savings Policy to allow hospitals to opt out of the standard policy.
- Staff is concerned about the potential for approving adjustments based on hospital-sourced data that cannot be independently verified by the Commission, and without non-hospital stakeholder input.
- Given current efforts to redesign the Maryland Hospital-Acquired Conditions program, staff may not have sufficient bandwidth to also redesign PAU Savings.

## Next Steps

As presented to the Performance Measurement Work Group in the March and April meetings, HSCRC staff plans to implement any additional measurement of PAU for the calendar year 2019 performance period, effective for payment adjustments in RY2021 (i.e., RY 2020 will use

readmissions and PQIs unless stakeholders waive requirement to preview measures for one year). Although hospital-defined PAU may not affect all hospitals in terms of measurement, hospitals opting out of the standard PAU Savings program will affect other hospitals due to the relative ranking used in PAU Savings. This timeline aims to allow development and testing of the impact of opt-outs on other hospitals before the performance period begins.

In May and June, staff expects to receive additional comments on hospital-defined PAU from the Commission and stakeholders through the draft and final submission of the RY2019 PAU Savings Policy. Given the burden of separate reporting and measurement for each hospital in PAU Savings, staff plans to explore alternative approaches to hospital-defined PAU, such as in rate reviews. Staff plans to perform analyses and solicit input and feasibility on RY2021 hospital-defined PAU throughout the summer and fall.

## Discussion on PAU Savings Hospital Protections

### PAU Savings Protections

As detailed in the recommended Draft RY2019 PAU Savings Policy, staff is recommending that the PAU savings reductions continue to be capped at the state average if a hospital serves a high proportion of disadvantaged populations.<sup>29</sup> In the RY2019 Policy, this criterion was defined as hospitals in the top quartile in Maryland in terms of the percentage of their total inpatient equivalent case-mix adjusted discharges that are Medicaid/Self-Pay/Charity. This policy was initially adopted because hospitals serving areas with higher socioeconomic burden may face additional challenges in reducing PAU, such as issues with transportation, family and community resources, or health literacy barriers.

These hospitals may have more room for improvement due to historically high rates of PAU, but it may be more difficult for them to reach statewide attainment targets. Because, unlike other HSCRC performance-based programs, the PAU Savings Program does not credit hospitals for improvement, the PAU Savings Protection policy aims to ensure that these hospitals have the needed resources to serve their communities, while still incentivizing them to reduce their PAU percentage below the statewide level to receive a lower reduction. On the other hand, the Commission does not want to excuse poor quality of care or inadequate care coordination for patients in disadvantaged communities. In light of these issues, further attention will be given to modifying or eliminating this protection in future years.

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<sup>29</sup> The measure includes the percentage of Medicaid and Self-pay or Charity equivalent case-mix adjusted discharges for inpatient and observation cases with 23 hours or longer stays, with protection provided to those hospitals in the top quartile.

## Initial Considerations

Staff continues to discuss the issue with stakeholders, including consumers, payers, and hospitals, and is exploring methods of risk adjustment. At this time, staff has presented these concerns and potential strategies to the Consumer Standing Advisory Committee and the Performance Measurement Work Group. Feedback has been broad, and staff continues to solicit additional feedback to understand how best to proceed. For example, members of the Consumer Standing Advisory Committee suggested scaling the protection based on improvement.

## Next Steps

HSCRC is seeking input on the protections under the policy to ensure that the policy remains appropriate and valid for the goals of the PAU Savings Program. In particular, staff is considering adjusting the protection for other factors or phasing out the protection over time. For potential inclusion in future RY policies, staff will model the impact of phasing out the protection and potential ways to scale the protection for improvement by Fall 2018, which will be just before the next performance year (CY 2019, RY 2021). Again, staff intends to alter or phase out the PAU protection in future years, so feedback on how to most responsibly proceed is of utmost importance.